# Chemical Terrorism Preparedness

## WHAT IS THE PUBLIC HEALTH PROBLEM?

The release of a chemical weapon of mass destruction (WMD) could result in hundreds or thousands of casualties, and the source of the release likely would be obvious to public health officials. However, the source of an accidental chemical release or the hidden, intentional contamination of food or drinking water would be more difficult to identify. During the past century, chemical releases accounted for as many as 50 percent of the 350 WMD incidents that have occurred worldwide, according to the Monterey Institute of International Studies, which maintains an open-source database of criminal and terrorist incidents involving WMD agents.

## WHAT HAS CDC/ATSDR ACCOMPLISHED?

CDC/ATSDR is responsible for detecting, responding to, and preventing human illness caused by a chemical release. To meet these responsibilities, CDC/ATSDR has:

- Developed a Rapid Toxic Screen to analyze human blood and urine samples for 150 chemical agents likely to be used in chemical terrorism.
- Assisted local, state, and federal agencies during national and international chemical terrorism events, providing chemical and toxicologic expertise, etiologic chemical analysis, and clinical guidance.
- Developed revolutionary new methods for detecting and measuring botulinum toxin in human and environmental samples.
- Provided training, exercises, proficiency testing and more than $100 million over three years to improve state and local laboratories' capacity to respond to chemical terrorism.
- Supported surveillance for chemical terrorism events through the American Association of Poison Control Centers' Toxic Exposure Surveillance System (TESS), which monitors and analyzes real-time data from the nation's poison-control centers.
- Operated a 24-hour emergency-response line, at 770-488-7100, to provide chemical-related technical information to federal, state, and local responders.
- Launched a Web site at http://www.bt.cdc.gov/agent/agentlistchem.asp, which contains fact sheets, case definitions, and clinical syndromes for specific chemicals and categories of chemicals.
- Created 160 extensive Toxicological Profiles and Public Health Statements—along with 180 short summaries, called ToxFAQs™—about hazardous substances, available on CD-ROM and the Internet.
- Developed the Managing Hazardous Material Incidents references, which provide recommendations for managing patients exposed to hazardous materials, both at the scene of the release and at the hospital.
- Trained public health workers and first responders at the state, local, and federal levels in best practices for responding to a chemical emergency.
- Monitored the safe destruction of millions of pounds of aging and obsolete chemical weapons.

## WHAT ARE THE NEXT STEPS?

CDC/ATSDR will expand the U.S. public health system's capacity to detect, respond to, and prevent human illness caused by a chemical release, by continuing to improve laboratories' response capacity; expand surveillance activities; create Web and satellite broadcasts to train clinicians and public health officials; provide chemical-specific resources; and strengthen collaboration among local, state, and federal public health partners.

For information on this and other CDC and ATSDR programs, visit www.cdc.gov/programs. December 2004